

**Flood Control Project Maintenance  
Levee Inspections**

## Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2019

### Sutter Maintenance Yard Maintenance Area 0007

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	11.90	04/04/2019 04/04/2019	Sterling York

LM Start		Rating **	A	Issue No.	1
LM End		Issue Type +	Ma	Location *	
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Operations & Maintenance Manuals			°	°
				°	°
DWR ID	DWR_MA0007_01_s_2013_1				
Comment Code					
Inspector Comment					
New O&M manuals were given to the LMA now that construction is complete. The O&M manuals are located at the Sutter Maintenance Yard.					

No Photos

LM Start		Rating **	A	Issue No.	3
LM End		Issue Type +	Ma	Location *	
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Emergency Supplies & Equipment			°	°
				°	°
DWR ID	DWR_MA0007_01_s_2013_3				
Comment Code					
Inspector Comment					
Emergency supplies and equipment are stored at the Sutter Maintenance Yard.					

No Photos

LM Start		Rating **	A	Issue No.	4
LM End		Issue Type +	Ma	Location *	
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Flood Preparedness & Training			°	°
				°	°
DWR ID	DWR_MA0007_01_s_2013_4				
Comment Code					
Inspector Comment					
Sutter Maintenance Yard employees attend the annual Flood Fight class put on by DWR.					

No Photos

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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Unit No. 01 Feather River	Right	11.90	04/04/2019 04/04/2019	Sterling York

LM Start	0.00	Rating **	A	Issue No.	10
LM End	11.89	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			39.310938 °	39.439672 °
				-121.637634 °	-121.641504 °
DWR ID	DWR_MA0007_01_s_2019_10				
Comment Code					
V1 : Control annual grass and weeds on the levee slopes and easements.					
Inspector Comment					
The annual vegetation is well maintained, Spring 2019.					

Photo 1 of 1 : SP\_2019\_MA0007\_200\_10\_20190409\_00028.jpg



View looking upstream landside at the well maintained vegetation alongside the irrigation ditch, Spring 2019.

LM Start	0.00	Rating **	A	Issue No.	11	
LM End	11.89	Issue Type +	Ma	Location *	WS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start	End	
Item	Vegetation			39.310938 °	39.439672 °	
				-121.637634 °	-121.641504 °	
DWR ID	DWR_MA0007_01_s_2019_11					
Comment Code						
V1 : Control annual grass and weeds on the levee slopes and easements.						
Inspector Comment						
The annual vegetation is well maintained, Spring 2019.						

Photo 1 of 1 : SP\_2019\_MA0007\_200\_11\_20190409\_00029.jpg



View looking upstream waterside at the well maintained vegetation and re-grading of the levee crown, Spring 2019.

* Location		** Rating		+ Issue Type	
LS : Land Side	N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency	
WS : Water Side		M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence	
CR : Crown		U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement	

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Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	11.90	04/04/2019 04/04/2019	Sterling York

LM Start	0.31	Rating **	N	Issue No.	69
LM End	0.37	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			39.314991 °	39.315693 °
				-121.635038 °	-121.634459 °
DWR ID	DWR_MA0007_01_s _ 2016_69				
Comment Code					
T5 : Tree stumps.					
Inspector Comment					
Several tree stumps at levee toe still exist Fall 2018.					

Photo 1 of 1 : SP\_2019\_MA0007\_200\_69\_20190305\_00009.jpg



View looking downstream of several tree stumps at the levee toe on the waterside.

LM Start	0.92	Rating **	C	Issue No.	67	
LM End	0.92	Issue Type +	Ma	Location *	LS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Vegetation			39.323118 °		39.323118 °
				-121.632205 °		-121.632205 °
DWR ID	DWR_MA0007_01_s _ 2016_67					
Comment Code						
V2 : Remove the wild growth other than native grasses from the levee slopes.						
Inspector Comment						
The black berry bushes are continued to be sprayed and maintained at the levee toe and are over 20 feet from the levee crown, Spring 2019.						

No Photos

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown	<b>** Rating</b> A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	11.90	04/04/2019 04/04/2019	Sterling York

LM Start	1.55	Rating **	A/W	Issue No.	9
LM End	1.71	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2017 USACE Erosion Survey, DRAFT			39.332000 °	39.334240 °
				-121.633178 °	-121.633908 °
DWR ID	DWR_MA0007_01_f_2018_9				
Comment Code					
Inspector Comment					
2017 Site ID: FHR 47.5 R					
Status: Eroding					
2017 Field Notes: Vertical face into the levee prism, huge eddy.					
Site History: 2011 - The toe of the levee has been excavated by the land owner. Small holes throughout the site have been filled with a plaster like substance. Large canal on landside slope and over the levee toe.					

No Photos

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Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Feather River	Right	11.90	04/04/2019 04/04/2019	Sterling York

LM Start	1.76	Rating **	M	Issue No.	73
LM End	1.76	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			39.334868 °	39.334868 °
				-121.633773 °	-121.633773 °
DWR ID	16926				

**Comment Code**

**Inspector Comment**

FS\_ID:53950  
DS\_ID:16926  
EP\_NO: N/A  
Repair Type: Non-Urgent  
Crossing Status: Found  
UCIP Comments: 05/07/2019 (O. Magana - DWR UCIP)12/07/2018 Encroachment Owner is Butte Water District c/o Mark Orme, District Manager, 735 Virginia Street, Gridley, CA 95948, 1-530-846-3100. Information obtained from the Levee\_Encroachment\_listing\_11288.pdf obtained from SBFCA which also indicates CVFPB Permit Process - New Permit. Need to coordinate with CVFPB to determine status of permit. (O. Magana - DWR UCIP)  
08/09/2017 Dual 60-inch pipes are still present--no modifications appear to have been made to this structure. No permit or owner has been identified. Need to contact owner to notify of safety issue regarding the missing covers for CMP riser. (DWR UCIP - O. Magana)08/02/2017 After reviewing record drawings it appears this crossing has remained. Project Improvements begin at Station (Sta) 1765+00 (MA0007 about LM 1.73) to Sta 2303+50 (ST0005 about LM 1.23), refer to record drawings for the Feather River West Levee Improvement Plans Station 1765+00 to 2368+26, Project D details. MA0007 project details include NO CUTOFF WALL from Sta 1765+00 (MA0007 about LM 1.73) to 1815+00 (MA0007 about LM 2.64) and LEVEE DEGRADE AND RECONSTRUCTION WITH CUT OFF WALL from Sta 1817+00 (MA0007 about LM 2.69) to Sta 2289+00, Sta 2287+00 to Sta 2290+00 (MA0007 about LM 11.60). (DWR UCIP - O. Magana)  
05/16/2016 Feather River West Levee Improvement Project--Levee currently under construction.06/10/2015 Debris still present in risers and pipes were not replaced with the SBFCA project.12/29/2014 Same as last inspection.05/19/2014 Same as last inspection.11/06/2013 Same as last inspection.05/13/2013 SBFCA project recommends replacing in accordance with title 23.05/07/2013 Same debris issue as last inspection. Recommend repairing top cover to prevent falls. Wheel to open gate chained and locked so could not verify gate operation.10/31/2012 Debris inside riser could prevent slide gate from closing. This crossing was listed in the USACE Periodic Inspections as ID# USACE\_CESPK\_MA07\_2010\_a\_0060 however, no issues noted. (DWR UCIP - O. Magana)  
FIELD\_STRUCT\_DESC: 1 of 2: 60-inch corrugated metal gravity drainage pipe through the levee, 12.5 feet below the crown. Slide gate in a 78-inch corrugated metal pipe (CMP) well on the waterside (WS) slope. Concrete bulkheads on both ends. Reinforced concrete spillway on the WS end. (Existing 60-inch corrugated metal gravity drainage pipe crossing remained during the Feather River West Levee Improvements, Project D). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 152, March 1957 (Station

Photo 1 of 3 : UCIP\_SP\_2019\_53950\_77346.jpg



Overview of levee crown looking upstream towards crossings.

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1+90). Sutter Butte Flood Control Agency (SBFCA) Feather River West Levee Project, Volume 4 of 6 (Project D) Feather River West Levee Improvement Plans Sta 1765+00 to 2368+26, 2016, Volume 4-SBFCA\_Record\_Drawings\_Project D\_2017.05.16.pdf, Drawing No. C-101].

FS Date: 5/7/2019 12:42:03 PM

LM Start	<b>1.76</b>	Rating **	M	Issue No.	<b>73 (cont)</b>
LM End	<b>1.76</b>	Issue Type +	Ma	Location *	

Photo 2 of 3 : UCIP\_SP\_2019\_53950\_77351.jpg



LS view: concrete headwall with dual 60-inch crossings visible from LS.

LM Start	<b>1.76</b>	Rating **	M	Issue No.	<b>73 (cont)</b>
LM End	<b>1.76</b>	Issue Type +	Ma	Location *	

Photo 3 of 3 : UCIP\_SP\_2019\_53950\_77342.jpg



LS view: view of canal looking west from crossing.

* Location	** Rating	+ Issue Type
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N/A : Not Applicable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	

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Unit No. 01 Feather River	Right	11.90	04/04/2019 04/04/2019	Sterling York

LM Start	1.76	Rating **	M	Issue No.	74
LM End	1.76	Issue Type +	Ma	Location *	
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP LMA Responsibility			39.334886 °	39.334886 °
				-121.633783 °	-121.633783 °
DWR ID	17011				

**Comment Code**

**Inspector Comment**

FS\_ID:53951  
DS\_ID:17011  
EP\_NO: N/A  
Repair Type: Non-Urgent  
Crossing Status: Found  
UCIP Comments: 12/07/2018 Encroachment Owner is Butte Water District c/o Mark Orme, District Manager, 735 Virginia Street, Gridley, CA 95948, 1-530-846-3100. Information obtained from the Levee\_Encroachment\_listing\_11288.pdf obtained from SBFCA which also indicates CVFPB Permit Process - New Permit. Need to coordinate with CVFPB to determine status of permit. (O. Magana - DWR UCIP) 08/09/2017 Dual 60-inch pipes are still present--no modifications appear to have been made to this structure. No permit or owner has been identified. Need to contact owner to notify of safety issue regarding the missing covers for CMP riser. (DWR UCIP - O. Magana) 08/02/2017 After reviewing record drawings it appears this crossing has remained. Project Improvements begin at Station (Sta) 1765+00 (MA0007 about LM 1.73) to Sta 2303+50 (ST0005 about LM 1.23), refer to record drawings for the Feather River West Levee Improvement Plans Station 1765+00 to 2368+26, Project D details. MA0007 project details include NO CUTOFF WALL from Sta 1765+00 (MA0007 about LM 1.73) to 1815+00 (MA0007 about LM 2.64) and LEVEE DEGRADE AND RECONSTRUCTION WITH CUT OFF WALL from Sta 1817+00 (MA0007 about LM 2.69) to Sta 2289+00, Sta 2287+00 to Sta 2290+00 (MA0007 about LM 11.60). (DWR UCIP - O. Magana) 05/16/2016 Feather River West Levee Improvement Project--Levee currently under construction. 06/10/2015 Debris still present inside riser and pipe was not replaced with the SBFCA project. 12/29/2014 Same as last inspection. 05/19/2014 Same as last inspection. 11/06/2013 Same as last inspection. 05/13/2013 SBFCA project recommends replacing in accordance with title 23.05/07/2013 Same as last inspection. Recommend constructing cover to prevent falls. Wheel to operate gate chained and locked so gate operation could not be verified. 10/31/2012 no cover; debris inside riser could prevent slide gate from closing. This crossing was listed in the USACE Periodic Inspections as ID# USACE\_CESPK\_MA07\_2010\_a\_0060 however, no issues noted. (DWR UCIP - O. Magana) FIELD\_STRUCT\_DESC: 2 of 2: 60-inch corrugated metal gravity drainage pipe through the levee, 12.5 feet below the crown. Slide gate in a 78-inch corrugated metal pipe (CMP) well on the waterside (WS) slope. Concrete bulkheads on both ends. Reinforced concrete spillway on the WS end. (Existing 60-inch corrugated metal gravity drainage pipe crossing remained during the Feather River West Levee Improvements, Project D). [Additional Reference(s): DWR Levee Log, 2005. USACE Sacramento O&M Manual 152, March 1957 (Station 1+90). Sutter Butte Flood Control Agency (SBFCA) Feather River West

Photo 1 of 3 : UCIP\_SP\_2019\_53951\_77352.jpg



Overview of levee crown looking upstream towards crossings.

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LS : Land Side	N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency	
WS : Water Side		M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence	
CR : Crown		U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement	

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Levee Project, Volume 4 of 6 (Project D) Feather River West Levee Improvement Plans Sta 1765+00 to 2368+26, 2016, Volume 4-SBFCA\_Record\_Drawings\_Project D\_2017.05.16.pdf, Drawing No. C-101].  
FS Date: 5/7/2019 12:42:41 PM

LM Start	<b>1.76</b>	Rating **	M	Issue No.	<b>74 (cont)</b>
LM End	<b>1.76</b>	Issue Type +	Ma	Location *	

Photo 2 of 3 : UCIP\_SP\_2019\_53951\_77357.jpg



LS view: concrete headwall with dual 60-inch crossings.

LM Start	<b>1.76</b>	Rating **	M	Issue No.	<b>74 (cont)</b>
LM End	<b>1.76</b>	Issue Type +	Ma	Location *	

Photo 3 of 3 : UCIP\_SP\_2019\_53951\_77358.jpg



LS view: canal located on LS, photo taken from levee crown looking west.

<b>* Location</b> LS : Land Side    N/A : Not Applicable WS : Water Side CR : Crown		<b>** Rating</b> A : Acceptable                      N : Not Inspected/Rated M : Minimally Acceptable        C : Corrected U : Unacceptable                  A/W : Acceptable but Monitor & Maintain		<b>+ Issue Type</b> Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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